BRUHATH BANGALORE MAHANAGARA PALIKE
PROJECT DIVISION YELAHANKA ZONE

Name of Work: Construction of Samudhaya Bhavana Building at Attur Village in Ward No.03

BILL OF QUANTITIES

SL no	Description of work	Unit	building Quantity	Rate	Amount
1	Earth work in surface excavation by mechanical means for lowering & leveling the ground without blasting for all works other than foundation in Ordinary/Soft rock & depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work (P.No. 8, I.No. 1.13 of PWP & IWTD SR 2021-22)	Cum	152.25	298.10	45386.00
2	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work.Depth exceeding 1.5 m, but not exceeding 3 m (P.No. 9, I.No. 1.15.2 of PWP & IWTD SR 2021-22)	Cum	194.82	352.00	68577.00
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. (P.No. 07, I.No. 1.9 of PWP & IWTD SR 2021-22)	cum	173.54	224.40	38941.00

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Sl. no	Description of work	Unit	Quantity	Rate	Amount
4	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates(P.No. 15, I.No. 2.1.3 of PWP & IWTD SR 2021-22)	cum	18.85	6327.20	119261.00
5	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) (P.No. 9, I.No. 5.4 of PWP & IWTD SR 2021-22)	cum	44.07	5964.20	262842.00
6	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately)Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates(P.No. 17, I.No. 2.4.1 of PWP & IWTD SR 2021-22)	cum	2.54	6705.60	17049.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
7	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (P.No. 17, I.No. 6.32 of PWP & IWTD SR 2021-22)	sqm	121.03	1322.20	160019.00
	FIRST FLOOR		178.66	1335.42	238580.00
8	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (P.No. 17, I.No. 6.33 of PWP & IWTD SR 2021-22)	sqm	77.70	1173.70	91196.00
	FIRST FLOOR		67.20	1185.44	79661.00
9	Providing and laying in position Reinforced cement concrete M25 Using 20 mm nominal size graded crushed coarse aggregates for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (KWPD 2021-22, V-I, Item No.2.4.3, Page No.17)	cum	2.16	7621.79	16463.00
	FIRST FLOOR		29.81	7483.21	223060.00

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no	Description of work	Unit	Quantity	Rate	Amount
10	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates(P.No. 17, I.No. 2.4.3 of PWP & IWTD SR 2021-22)	cum	7.18	7275.35	52237.00
	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately)M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates(P.No. 17, I.No. 2.5.2 of PWP & IWTD SR 2021-22)	cum	39.72	8569.44	340391.00
	GROUND FLOOR, COLUMN	cum	4.61	7855.32	36197.00
	GROUND FLOOR, STAIR CASE & CHEJJA	cum	5.44	10448.87	56863.00
	FIRST FLOOR LINTEL, ROOF BEAM, ROOF SLAB	cum	34.17	8655.13	295726.00
	FIRST FLOOR, COLUMN	cum	4.61	7933.87	36559.00
	FIRST FLOOR, STAIR CASE & CHEJJA	cum	5.28	10458.29	55220.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
12	Providing Thermo-Mechanically Treated bars of grade Fe-500D or more Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately)(KWPD 2021-22, V-II, Item No.11.32, Page No.84)	Kgs	8404.54	116.60	979969.00
	FIRST FLOOR	Kgs	4605.60	117.77	542383.00
13	Providing 12 mm cement plaster with cement mortar 1:4 (1 cement: 4 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. (P.No. 41, I.No. 8.1.1 of PWP & IWTD SR 2021-22)	Sqm	1572.20	239.80	377012.00
	FIRST FLOOR	sqm	394.06	249.98	98505.00
14	Providing 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand) including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.(P.No. 40, I.No. 8.2.1 of PWP & IWTD SR 2021-22)	Sqm	156.70	278.30	43610.00
	FIRST FLOOR	sqm	262.65	281.08	73826.00
15	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge. (P.No. 50, I.No. 8.51 of PWP & IWTD SR 2021-22)	Sqm	1728.90	91.30	157848.00
	FIRST FLOOR	sqm	656.71	92.21	60557.00
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (P.No. 48, I.No. 8.39 of PWP & IWTD SR 2021-22)	sqm	1572.20	104.50	164294.00
FIRST FLOOR		sqm	394.06	105.55	41591.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
17	Finishing walls with textured exterior paint of required shade :New work (Two coats applied @ 3.28 ltr/10 m^2) over and including priming coat of exterior primer applied @ 2.20kg/10 m^2 to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.(P.No. 45, I.No. 8.29 of PWP & IWTD SR 2021-22)	sqm	156.70	228.80	35853.00
	FIRST FLOOR	sqm	262.65	231.09	60695.00
18	Providing and laying vitrified floor tiles in different sizes 500x500 mm (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joints with white cement and matching pigments etc., complete.(P.No. 60, I.No. 9.12.1, V-2 of PWP & IWTD SR 2021-22)	sqm	17.37	1125.30	19546.00
	FIRST FLOOR	sqm	5.04	1136.55	5728.00
19	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joint with white cement & matching pigments etc. complete.Size of Tile 500x500 mm (P.No. 61, I.No. 9.17.1 of PWP & IWTD SR 2021-22)	sqm	134.40	1139.60	153162.00
	FIRST FLOOR	sqm	26.79	1151.00	30835.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
20	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.** Polished Granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent. (P.No. 63, I.No. 9.23 of PWP & IWTD SR 2021-22)	sqm	152.31	3169.10	482678.00
	FIRST FLOOR	sqm	119.10	3200.79	381214.00
21	Providing and fixing 18 mm thick gang saw cut granite of any color and shade, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch up, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. (P.No. 69, I.No. 10.1.1, V-2 of PWP & IWTD SR 2021-22)	sqm	54.23	3835.17	207962.00
22	Providing and laying flooring and steps fine machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints finished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications.(P.No. 64, I.No. 9.30 of PWP & IWTD SR 2021-22)	sqm	18.00	2641.10	47540.00
	FIRST FLOOR	sqm	29.70	4950.62	147033.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
23	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge. (P.No. 133, I.No. 15.1 of PWP & IWTD SR 2021-22)	sqm	140.00	835.89	117025.00
24	Providing & fixing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level, over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame.Flat surfaces (P.No. 133, I.No. 15.1 of PWP & IWTD SR 2021-22)	sqm	67.50	1046.10	70612.00
	FIRST FLOOR	sqm	86.85	1056.56	91762.00
25	Providing & fixing of louvered ventilator made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the ventilator frame. The frame having overall size of 39mm x 39mm with GI reinforcement of 1mm thickness. Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size – 1000mm x 1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) (P.No. 110, I.No. 12.85 of PWP & IWTD SR 2021-22)	sqm	1.08	5410.57	5843.00

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Sl. no	Description of work	Unit	Quantity	Rate	Amount
26	Providing & fixing of 2.5 track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 94mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm x 58mm with GI reinforcement of 1.5mm and mesh sash of size 25mm x 42mm. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24 mm. Windows shall be provided with 5mm plain float glass, standard hardware& single point locking system with touch lock. Wall thickness of frame & sash shall be of 2mm-2.5mm. Maximum possible size – 1819mm x 1819mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) (P.No. 111, I.No. 12.89 of PWP & IWTD SR 2021-22)	sqm	18.00	7394.20	133096.00
	FIRST FLOOR	sqm	18.00	7468.14	134427.00
27	Providing & fixing factory made PVC Door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet metered cut at corners & jointed 2 No.s of 150mm long brackets of 15x15mm M.S Square tube, the entire door frame to be reinforced with 19x19mm M.S Square tube of 19 gauge. The door frame to be fixed to the wall using M.S. Screws of 65/80mm size complete as per manufacturers specification & direction of Engineer-in-charge. (P.No. 105, I.No. 12.54 of PWP & IWTD SR 2021-22)	sqm	1.89	522.50	988.00
	FIRST FLOOR	sqm	3.78	527.73	1995.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
28	Providing & fixing 30mm thick factory made rigid foam Prelam Panelled Door Shutters made from M.S. tube of 19x19mm, 19 gauge for stiles and 15x15mm for top & bottom rails, covered with heat moulded Prelaminated PVC C Channel of 5mm thick sheet & 30x50mm wide to form stiles & 5mm thick & 75mm wide Prelaminated PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail, Panelling of 5mm thick PVC sheet Prelaminated on either side fitted in the M.S. frame, Sealed to the stiles & rails with PVC Designer beading on either side & joined together with solvent cement adhesive etc., Complete as per manufacturers specification & direction of Engineer-in-charge fixed to frames with 3 nos of 75mm Aluminium hinges -do- with both side prelam.(P.No. 106, I.No. 12.55.1 of PWP & IWTD SR 2021-22)	sqm	1.58	4183.30	6589.00
	FIRST FLOOR	sqm	3.15	4225.13	13309.00
29	Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.(P.No. 99, I.No. 12.11 of PWP & IWTD SR 2021-22)	cum	0.44	99432.30	43253.00
	FIRST FLOOR	cum	0.27	100426.62	27115.00
30	Providing and fixing in position fully panelled Honne wood shutters for doors with stiles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures)(P.No. 100, I.No. 12.15 of PWP & IWTD SR 2021-22)	sqm	27.72	5581.40	154716.00
	FIRST FLOOR	sqm	20.16	5637.21	113646.00
31	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. (P.No. 107, I.No. 12.68.1 of PWP & IWTD SR 2021-22)	each	20.00	41.80	836.00
	FIRST FLOOR	each	20.00	42.22	844.00
2	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete. (P.No. 107, I.No. 12.60 of PWP & IWTD SR 2021-22)	each	6.00	915.20	5491.00

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Sl. no	Description of work	Unit	Quantity	Rate	Amount
	FIRST FLOOR		6.00	924.35	5546.00
33	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete (P.No. 107, I.No. 12.63 of PWP & IWTD SR 2021-22)	each	5.00	122.10	611.00
	FIRST FLOOR	each	5.00	123.32	617.00
34	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications.(P.No. 64, I.No.9.32 of PWP & IWTD SR 2021-22)	sqm	22.00	1259.50	27709.00
35	Earth work excavation for pipeline trenches in all kinds of soils bymechanical means above 600 mm trench width as per drawing andtechnical specifications, including setting out, construction of shoring,strutting, barricading, caution lights, bracing, using sight rails & boningrods at every 100 mm whevere necessary as directed, removal ofstumps and other deleterious matter, dressing of sides and levellingthe bottom of trench to the extent required , utilising the availableexcavated earth locally for the work etc., and all other appurtenancescomplete in the following strata. (P.No. 10, I.No. 1.17.1 of PWP & IWTD SR 2018-19)	cum	14.78	213.40	3154.00
36	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m , and lift upto 1.5m.Including cost of all labour complete as per specifications (P.No. 10, I.No. 1.17.1 of PWP & IWTD SR 2018-19)	cum	9.45	134.20	1268.00

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Sl no	Description of work	Unit	Quantity	Rate	Amount
37	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. (KPWD SR 2021-22, Volume-II, Item No.13.34)	ltr	2000.00	8.80	17600.00
38	Supply and delivery of Centrifugal pumpset at site brand new best make and with discharge duty confirming to ISI standards and its latest amendments. 2 HP, Size 65x50 Head 13M, Discharge 462 LPM(P.No. 164, I.No. 46.1 of PWP & IWTD SR 2021-22)	each	1.00	16967.50	16968.00
39	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15mm C.P. brass pillar taps (KPWD SR 2021-22, Volume-II, Item No.14.7.1, Page No.124)	each	5.00	2781.90	13910.00
	FIRST FLOOR	each	2.00	2809.72	5619.00
40	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : 510x1040 mm bowl depth 250 mm (P.No. 125, I.No. 14.10.1.1 of PWP & IWTD SR 2018-19)	each	1.00	5467.00	5467.00
41	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid(P.No. 123, I.No. 14.3.1 of PWP & IWTD SR 2021-22)	each	1.00	5505.50	5506.00
	FIRST FLOOR	each	2.00	5560.56	11121.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
42	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge Concealed work, including cutting chases and making good the walls etc. 15mm nominal dia pipes.(I.No. 13.32.1 of PWP & IWTD SR 2021-22,1st Corrigendum and Addendum order - 21-04-2022)	M	50.00	336.60	16830.00
43	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge Concealed work, including cutting chases and making good the walls etc. 20mm nominal dia pipes.(I.No. 13.32.2 of PWP & IWTD SR 2021-22,1st Corrigendum and Addendum order - 21-04-2022)	M	50.00	410.30	20515.00
44	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge Concealed work, including cutting chases and making good the walls etc. 25mm nominal dia pipes.(I.No. 13.32.3 of PWP & IWTD SR 2021-22,1st Corrigendum and Addendum order - 21-04-2022)	M	50.00	523.60	26180.00

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SL. no	Description of work	Unit	Quantity	Rate	Amount
45	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge Concealed work, including cutting chases and making good the walls etc. 32mm nominal dia pipes.(I.No. 13.32.4 of PWP & IWTD SR 2021-22,1st Corrigendum and Addendum order - 21-04-2022)	M	50.00	611.60	30580.00
46	Constructing brick masonry chamber of internal dimension 600x450mm and depth of 600mm (inner dimensions) with modular bricks of CD 75 in cement mortar 1:6, bed concrete 150mm thick with 1:3:6, plastering 12 mm thick with cement mortar 1:4, CC 1:2:4 coping 75mm thk for fixing CI cover & frame etc. excluding the cost of CI frame and cover.(P.No. 187, SOR CODE-T130A of PWP & IWTD SR 2021-22,Vol-V)	Each	3.00	4811.40	14434.00
47	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-2016 with latest ammendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials with electrofusion welding, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bedns, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc HDPE Grade PE100-PN6.0,200mm dia..(P.No. 126, SOR Code-K060I of PWP & IWTD SR 2021-22,Vol-V)	M	50.00	946.00	47300.00
48	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore (P.No. 114, I.No. 13.2.2 of PWP & IWTD SR 2021-22,Vol-II)	Each	15.00	379.50	5693.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
49	Providing and fixing brass stop cock of approved quality : 20 mm nominal bore(P.No. 114, I.No. 13.3.2 of PWP & IWTD SR 2021-22,Vol-II)	Each	5.00	379.50	1898.00
50	providing and fixing square-mouth S. W. gully trap class SP-1 complete with C.1. grating brick masonry chamber 150 x100 mm size P type With Non Modular common burnt clay bricks of designation 3.5 & with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover t5 be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:.(I.No. 13.39 of PWP & IWTD SR 2021-22,1st Corrigendum and Addendum order - 21-04-2022)	Each	10.00	2528.90	25289.00
51	Providing and fixing PTMT grating of approved quality and colour Circular type 100 mm nominal dia.(P.No. 118, I.No. 13.22.1.1of PWP & IWTD SR 2021-22,Vol-II)	Nos	5.00	97.90	490.00
52	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete. (P.No. 128, I.No. 14.31 of PWP & IWTD SR 2021-22,Vol-II)	each	7.00	1068.10	7477.00
	FIRST FLOOR	each	2.00	1068.10	2136.00
53	Concealed Conduit System: Supplying .... Mm dia 2mm2.5mm Thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc... and running before concreting th eslab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be convered using PVC end enclosures. run with 18SWG GI fish wire wherever necessary (P.No. 1, I.No. 1.2 of PWD Ele SR 2021-22)	M	75.00	61.00	4575.00
54	1.2.2) 25mm dia 2mm thick	M	50.00	70.00	3500.00
55	1.2.3) 32mm dia 2.5mm thick	M	50.00	93.00	4650.00
56	57.05) PVC pipe-50mm dia (P.No. 21, Sl.No. 448 of BESCOM SR 2021-22)	Mtr	300.00	52.00	15600.00
57	57.07) PVC pipe-75mm dia (P.No. 21, Sl.No. 450 of BESCOM SR 2021-22)	Mtr	75.00	80.00	6000.00
58	57.07) PVC pipe-100mm dia (P.No. 20, Sl.No. 452,of BESCOM SR 2021-22)	Mtr	75.00	128.00	9600.00

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Sl. no	Description of work	Unit	Quantity	Rate	Amount
59	Supplying heavy gauge PVC Conduit Pipe .... dia ..... mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering upto the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. (P.No. 1, I.No. 1.3 of PWD Ele SR 2021-22)	M	75.00	75.00	5625.00
60	1.3.2) 25 mm dia 2 mm thick	M	75.00	80.00	6000.00
61	1.3.3) 32 mm dia 2.5 mm thick		50.00	105.00	5250.00
62	1.3.4) 40 mm dia 2.5 mm thick		50.00	119.00	5950.00
63	Supplying and wiring adopting loop system in existing pvc conduit/casing caping using 1100v grade,COPPER conducter flexible multistrand FRLS PVC insulated,2x1.5Sq.mm Cable confirming to the GTP without switch,the other end of the wire shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. Point wiring using Copper wire without Switch. (P.No. 5, I.No. 2.2 of PWD Ele SR 2021-22)	Nos	5.00	251.00	1255.00
64	2.2.2)Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	Nos	5.00	361.00	1805.00
65	2.2.3)Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	Nos	3.00	542.00	1626.00
66	2.2.4)Two outlet in a row,above 3Mtr upto 6Mtr from tapping point to out let via switches	Nos	5.00	671.00	3355.00
67	2.2.5)Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches box	Nos	5.00	979.00	4895.00
68	Suppling and fixing PVC/metal conduit deep juction boxes (P.No. 3, I.No. 1.5 of PWD Ele SR 2021-22)	EACH	10.00	49.00	490.00
69	1.5.2) 25mm deep juction box	EACH	10.00	51.00	510.00
70	1.5.3) 32mm deep juction box	EACH	10.00	69.00	690.00
71	1.12)Suplay and fixing Metal Fan Box with Round Hc	EACH	15.00	163.00	2445.00
72	Supplying and flush mounting powder coated metal box suitable for mounting modular switch plates.The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall (P.No. 9, I.No. 3.4 of PWD Ele SR 2021-22)	EACH	6.00	123.00	738.00
73	3.4.2) 4-5Way	EACH	5.00	138.00	690.00
74	3.4.3) 6 Way	EACH	5.00	212.00	1060.00
75	3.4.4) 8Way	EACH	2.00	250.00	500.00
76	3.4.5) 10-12Way	EACH	3.00	325.00	975.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
77	Wiring for lighting /power circuit using one of PVC insulated 1100v grade,multis and Copper conductor single core cable in open or consealed system of wiring.(P.No. 5, I.No. 2.3 of PWD Ele SR 2021-22)	mtr	300.00	26.00	7800.00
78	2.3.3) 2.5 sqmm	mtr	300.00	40.00	12000.00
79	2.3.4) 4 sqmm	mtr	350.00	59.00	20650.00
80	2.3.3) 6 sqmm	mtr	300.00	87.00	26100.00
81	Supplying and fixing of modular switch/Socket/stepped electeonic fan regulator/ dimmer/telephone socket etc on existing modular switch plate.(P.No. 10, I.No. 3.6 of PWD Ele SR 2021-22)	Each	60.00	88.00	5280.00
82	3.6.2) 6A mps Two way	Each	15.00	152.00	2280.00
83	3.6.4) Stepped fan regulator.	Each	15.00	313.00	4695.00
84	3.6.8) 16Amps one way switch	Each	5.00	249.00	1245.00
85	3.6.11) 6/16Amps univeral socket	Each	5.00	249.00	1245.00
86	Supplying and fixing superior gality modular switch mounting polycorbonate plate with neceaary supporting back plate with rquired nos. of machine screwes, bolts nuts etc., complete on the existing metal/PVC box..(P.No. 10, I.No. 3.6 of PWD Ele SR 2021-22)	Each	10.00	152.00	1520.00
87	3.5.2) 4 Module	Each	10.00	175.00	1750.00
88	3.5.3) 6 Module	Each	10.00	244.00	2440.00
89	3.5.4) 8 Module	Each	4.00	302.00	1208.00
90	3.5.5) 10-12 Module	Each	5.00	363.00	1815.00
91	Supplying and fixing regular MCB distribution boards on wall/ woodboard /flush mounting required clamps,bolts,nuts etc.. with provision for fixing suitable type capacity MCB's single phase /3 phase /single door with powder coated painting etc., complete (P.No. 27, I.No. 5.18 of PWD Ele SR 2021-22)	Each	1.00	1695.00	1695.00
92	5.18.8) 12Way SP & N	Each	1.00	2067.00	2067.00
93	5.18.9) 4Way TP & N	Each	1.00	3053.00	3053.00
94	5.18.10) 6Way TP & N	Each	1.00	3735.00	3735.00
95	Supplying and fixing and wiring Earth Leakage Miniature Circuit Breaker [RCCB] 240/450V up 300mA sensitivity on exsiting wood/panel board. (P.No. 28, I.No. 5.19 of PWD Ele SR 2021-22)	Each	2.00	4831.00	9662.00
96	5.19.3)32-40 Amps 4 Pole	Each	2.00	4677.00	9354.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
97	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia (P.No.40, I.No. 6.1 of PWD Ele SR 2021-22)	Each	1.00	2999.70	3000.00
98	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts. (P.No.40, I.No. 6.2 of PWD Ele SR 2021-22)	Each	1.00	4150.00	4150.00
99	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. (P.No. 55, I.No. 7.3 of PWD Ele SR 2021-22)	Mtr	40.00	118.00	4720.00
100	Copper strip ((7.3.6)25x3mm)	Mtr	25.00	523.00	13075.00
101	Copper strip ((7.22.6)8SWG copper wire)	Mtr	15.00	107.70	1616.00
102	Supplying of 2 feet LED PVC square batten with high quality diffuser with ife of 25000 burninng hours & 70% lumen maintance with CRI>80. power input :220-240V @ 50 hz & power factor >.9 along with CE approved drivers. 5 years warranty (P.No. 34, I.No. 11.3 of PWD Ele SR 2021-22)	Each	6.00	740.00	4440.00

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SL no	Description of work	Unit	Quantity	Rate	Amount
103	Supplying of recess mounting non integrated type LED down light 15-18W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clA, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per W, 120degree beam spread, life> 25000 burning hours and Compliance to IS10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LED's are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should< 5% of lamp Wage, short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 V. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2 years Warranty against any manufacturing defect working under standard electrical condition. (P.No. 34, I.No. 11.4 of PWD Ele SR 2021-22)	Each	30.00	2174.00	65220.00
104	Fixing all types and all capacities of fluorescent / fales ceiling /spot light /CFL / LED fittings indoor on the wall /ceiling / refters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps .(P.No. 34, I.No. 13.7 of PWD Ele SR 2021-22)	Each	36.00	119.00	4284.00
105	Supplying exhaust fan of 1440 RPM of 300 mm (12'') size with bracket blades complete for light duty suitable for operate of 230V 50Hz, AC Supply. (P.No. 22, I.No. 6.1 of PWD Ele SR 2021-22)	Each	6.00	1542.00	9252.00
106	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in-charge. (P.No. 128, I.No. 14.31 of PWP & IWTD SR 2021-22,Vol-II)	Each	6.00	110.00	660.00
107	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double bail bearing system. 48" Sweep (1200mm)(P.No. 22, I.No. 6.4 of PWD Ele SR 2021-22)	Each	20.00	2949.00	58980.00

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Sl. no	Description of work	Unit	Quantity	Rate	Amount
108	Supplying wall mounting fan suitable to operate at singlephase 230v AC. supply. (1200mm) 400 mm Sweep (P.No. 22, I.No. 6.5.2 of PWD Ele SR 2021-22)		8.00	2838.00	22704.00
109	Supplying, installing, testing and commissioning of Diesel Generator set with following specifications. Power rating as per standard reference condition as per-BS 5514/ISO 3046/ ISO 8528 & IS 1002/ISO 3046 Generator set specifications. Engine: Diesel generating set are rated at 1500RPM and conform to ISO 8528 specifications. The engines are radiator cooled, four stroke and multi cylinder, conforming to ISO 3046. The scope of supply includes: Electrical starter motor12V DC Battery charging alternator, Bosch fuel system with mechanical governor, A1 Class. Spin-on lube oil filter, Spin-on dual fuel filter with water separator, Turbocharger, Charge air cooler, Silencer (Hospital grade), Dry type air cleaner, Shutoff coil, Flywheel and flywheel housing, First fill of lube oil and coolant, Safety for low lube oil pressure, Safety for high water temperature, Permissible overload of 10% for one hour in 12 hours of operation Capacity of Fuel Tank: Fuel tank suitable for 8 hours of operation Alternator: Alternator is suitable for operation at 1500 RPM, 415 V, 0.8 pf (lag) suitable for 50 Hz, 3 phase, 4 wire systems, conforming to IS/IEC 60034-1. The Alternator is brush less type, screen	Each	1.00	352568.00	352568.00
110	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge to the appropriate disposal area. (P.No. 169, I.No.19.57 of PWP & IWTD SR 2021-22)	cum	174.82	62.70	10961.00
	BESCOM CHARGES				400000.00
	Sub Total Amount				**8744542.00**

Technical Sanction
Accorded For Rs.1044.00 lakhs
Head of A/C....P-3877
CER NO :.....28..... Dt:21/6/22

Executive Engineer
Yelahanaka Project Division

Administrative Approval
Accorded For Rs.1044.00 lakhs
Head of A/C....P-3877
CER NO :.....02..... Dt:18/8/2021

E.E. (Project)

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SL no	Description of work	Unit	Quantity	Rate	Amount
108	Supplying wall mounting fan suitable to operate at singlephase 230v AC. supply. (1200mm) 400 mm Sweep (P.No. 22, I.No. 6.5.2 of PWD Ele SR 2021-22)		8.00	2838.00	22704.00
109	Supplying, installing, testing and commissioning of Diesel Generator set with following specifications. Power rating as per standard reference condition as per-BS 5514/ISO 3046/ ISO 8528 & IS 1002/ISO 3046 Generator set specifications. Engine: Diesel generating set are rated at 1500RPM and conform to ISO 8528 specifications. The engines are radiator cooled, four stroke and multi cylinder, conforming to ISO 3046. The scope of supply includes: Electrical starter motor12V DC Battery charging alternator, Bosch fuel system with mechanical governor, A1 Class. Spin-on lube oil filter, Spin-on dual fuel filter with water separator, Turbocharger, Charge air cooler, Silencer (Hospital grade), Dry type air cleaner, Shutoff coil, Flywheel and flywheel housing, First fill of lube oil and coolant, Safety for low lube oil pressure, Safety for high water temperature, Permissible overload of 10% for one hour in 12 hours of operation Capacity of Fuel Tank: Fuel tank suitable for 8 hours of operation Alternator: Alternator is suitable for operation at 1500 RPM, 415 V, 0.8 pf (lag) suitable for 50 Hz, 3 phase, 4 wire systems, conforming to IS/IEC 60034-1. The Alternator is brush less type, screen	Each	1.00	352568.00	352568.00
110	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge to the appropriate disposal area. (P.No. 169, I.No.19.57 of PWP & IWTD SR 2021-22)	cum	174.82	62.70	10961.00
	BESCOM CHARGES				400000.00
	Sub Total Amount				**8744542.00**

Technical Sanction
Accorded For Rs.100.00 lakhs
Head of A/C....P-3877
CER NO :.....28..... Dt:.21/6/22

Executive Engineer
Yelahanaka Project Division

Administrative Approval
Accorded For Rs.100.00 lakhs
Head of A/C....P-3877
CER NO :.....02..... Dt:.18/8/2022

E.E. (Project)

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